

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: DRAFT

Region: Washington Regional Office
County: Wayne
NC Facility ID: 9600058
Inspector's Name: Robert Bright
Date of Last Inspection: 08/11/2016
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): Georgia-Pacific Wood Products LLC - Dudley Plywood/CNS Plant Facility Address: Georgia-Pacific Wood Products LLC - Dudley Plywood/CNS Plant 139 Brewington Road Dudley, NC 28333 SIC: 2436 / Softwood Veneer And Plywood NAICS: 321212 / Softwood Veneer and Plywood Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V				Permit Applicability (this application only) SIP: 15A NCAC 02Q .0516, 02Q .0501(c)(1), 02D .0512, and 02D .0521 NSPS: N/A NESHAP: N/A PSD: N/A PSD Avoidance: N/A NC Toxics: N/A 112(r): N/A Other: N/A			
Contact Data				Application Data			
Facility Contact Brandy Long Complex Environmental Manager (919) 705-0526 139 Brewington Road Dudley, NC 28333	Authorized Contact Michael Golden Plywood Plant Manager (919) 736-4385 138 Brewington Road Dudley, NC 28333	Technical Contact Brandy Long Complex Environmental Manager (919) 705-0526 139 Brewington Road Dudley, NC 28333	Application Number: 9600058.17A Date Received: 05/05/2017 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 09268/T22 Existing Permit Issue Date: 01/06/2017 Existing Permit Expiration Date: 09/30/2019				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2015	21.07	158.86	450.38	653.46	140.93	62.89	29.86 [Methanol (methyl alcohol)]
2014	32.08	340.64	327.34	795.15	265.78	39.74	22.23 [Methanol (methyl alcohol)]
2013	23.06	256.61	313.61	586.94	188.33	37.09	21.20 [Methanol (methyl alcohol)]
2012	23.43	249.08	307.26	572.02	186.27	37.34	21.32 [Methanol (methyl alcohol)]
2011	22.92	247.27	288.28	552.48	173.07	43.48	26.33 [Methanol (methyl alcohol)]
Review Engineer: Kevin Godwin Review Engineer's Signature: _____ Date: _____				Comments / Recommendations: Issue 09268/T23 Permit Issue Date: _____ Permit Expiration Date: 09/30/2019			

I. Introduction and Purpose of Application

- A. Georgia-Pacific Wood Products LLC (GP) operates a Chip-N-Saw (CNS) plant and a Plywood manufacturing plant at this Dudley, Wayne County site.
- B. This permit action is for the replacement of existing cyclone (ID No. CD-C3) and bagfilter (ID No. CD-BH3) installed on the tongue and groove sander (ID No. ES-TGS) and existing cyclone (ID No. CD-C4) and bagfilter (ID No. CD-BH4) installed on the big sander (ID No. ES-BS) with a new bagfilter (9,679 square feet of filter area, ID No. CD-BH5).
- C. Because this modification does involve significant changes to existing monitoring, it is being processed as a significant modification under 15A NCAC 02Q .0516. The applicant has requested that the application be processed under 15A NCAC 02Q .0501(c)(1).

II. Changes to Existing Air Permit

The following table provides a summary of changes made to the existing permit.

Page No.	Condition/Item	Description of Change(s)
Throughout	N/A	Change the application number and complete date; Change permit revision number to T23; Change the permit issuance/effective dates.
Cover letter	N/A	Updated PSD increment tracking paragraph.
3	Table of Permitted Equipment	Removed cyclones (ID Nos. CD-C3 and CD-C4) and bagfilters (ID Nos. CD-BH3 and CD-BH4) and replaced with bagfilter (ID No. CD-BH5) installed on Plywood sanding operations (big sander, ID No. ES-BS) and tongue and groove sander (ID No. ES-TGS).
14	2.1 D.	Removed cyclones (ID Nos. CD-C3 and CD-C4) and bagfilters (ID Nos. CD-BH3 and CD-BH4) and replaced with bagfilter (ID No. CD-BH5) installed on Plywood sanding operations (big sander, ID No. ES-BS) and tongue and groove sander (ID No. ES-TGS).
52	3	Included most recent shell version (v5.1, 08/03/2017) General Conditions.

III. Statement of Compliance

The facility was most recently inspected on August 11, 2016 by Mr. Robert Bright of the Washington Regional Office (WARO). According to the inspection report dated August 30, 2016, during the inspection the facility appeared to operate in compliance with all applicable air quality regulations and permit conditions.

The five-year compliance history is detailed in the report as follows:

Compliance History (5-year)

A Notice of Violation (NOV) was issued to the facility on June 2, 2011 regarding a May 9-10, 2011 incident where the RTO operated below the permitted minimum temperature of 1,579° F for approximately seven hours due to operator error and incorrect setting of the low-temperature interlock. The facility has since reprogrammed the low-temperature interlock to the correct minimum (1,579° F), which now shuts down dryer feed to force the operator to take action.

A Notice of Deficiency (NOD) was issued on August 23, 2012 for improper documentation of monthly inspections and observations per 2D .0512 and 2D .0521 in January 2013. It is important to note that WaRO feels the inspections were performed, though no documentation could be provided.

A NOD was issued on March 28, 2013 for improper documentation of first quarter 2013 thermocouple inspections per 40 CFR Part 63, Subpart DDDD. It is important to note that WaRO felt that the inspections were performed, though no documentation could be provided.

A NOD was issued on August 15, 2014 for the late submittal of the semi-annual summary report due July 30, 2014.

A NOD was issued on March 12, 2015 for not conducting the monthly external inspections required for November 2014 for the Chip-N-Saw control devices via Permit Specific Condition 2.1.H.1. The inspections were completed on December 3, 2014. Via conversations between Robert Bright of WaRO and Brandy Long of Georgia Pacific, it was understood that the required inspections were performed during November 2014, but not documented.

IV. Regulatory Review – Specific Emission Source Limitations

- A. 15A NCAC 02D .0512 “Particulates from Wood Products Finishing Plants” – This regulation requires particulate matter from working, sanding, or finishing wood products be controlled so as not to exceed the national ambient air quality standard beyond the property line.

The big sander (ID No. ES-BS) and the tongue and groove sander (ID No. ES-TGS) will now be controlled by a new bagfilter (ID No. CD-BH5). The DAQ Bagfilter Evaluation spreadsheet was used to determine that at least a 99.9% control efficiency can be expected. No changes are proposed for the big sander or tongue and groove sander that will affect potential short term or annual emissions. The existing permit includes standard monitoring, recordkeeping, and reporting requirements for the new bagfilter. Therefore, compliance is expected.

- B. 15A NCAC 02D .0521 “Control of Visible Emissions” – This regulation sets a visible emissions standard and applies to both the big sander and the tongue and groove sander. For sources that began operation after July 1, 1971, the visible emission standard is 20% opacity. The existing permit includes standard semi-annual monitoring, recordkeeping, and reporting for the big sander and tongue and the groove sander (ID Nos. ES-BS and ES-TGS). Compliance is expected.

V. Regulatory Review – Multiple Emission Source Limitations

- A. 15A NCAC 02D .0530 “Prevention of Significant Deterioration” – This facility is a PSD major stationary source. Emissions increases from the project must be compared to the PSD significant emission rate (SER).

For new and existing units, emissions increases are defined as the difference between the potential-to-emit (PTE) following completion of the project and the baseline actual emissions (BAE) before the project (baseline actual-to-potential).

Baseline Actual Emissions (BAE)

For existing units BAE is defined as “the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner/operator within the five-year period immediately preceding the date that a complete application is received by the Division for a permit required under this Rule.” For this project, the 24-month period beginning January 2012 and ending December 2013 was selected as the baseline period. BAE for ES-BS are calculated based on 2,531.5 hours of operation. BAE for ES-TGS are calculated based on 1,640.9 hours of operation.

Emissions were calculated by multiplying the bagfilter outlet grain loading 0.005 grains/dscf by the air flow 53,000 dscfm to be 2.27 lb/hr.

Potential to Emit (PTE)

PTE for ES-BS is calculated based on a permit limit of 7,200 hours of operation. PTE for ES-TGS is calculated based on a permit limit of 8,260 hours of operation. The current combined permit limit of 2.78 lb/hr is used for PTE calculations.

The following table taken from the application shows the difference between PTE and BAE for the proposed two projects is less than PSD SER for each pollutant.

Table – 1 PSD Evaluation

Modified Sources	PM (tpy)	PM-10 (tpy)	PM-2.5 (tpy)
Tongue and groove (ES-TGS)			
Baseline Actual Emissions (BAE)	1.2	1.0	1.0
Potential to Emit (PTE)	5.9	5.2	5.0
PTE minus BAE	4.7	4.2	4.0
Big sander (ES-BS)			
Baseline Actual Emissions (BAE)	1.7	1.5	1.5
Potential to Emit (PTE)	4.9	4.3	4.2
PTE minus BAE	3.2	2.8	2.7
Total Project	7.9	7.0	6.7
SER	25	15	10

DAQ reviewed the emissions factors and calculations and agrees that the proposed changes will not result in an increase in the facility's ability to produce plywood or lumber beyond the currently permitted rates. The short term and annual processing rate for both the big sander and the tongue and groove sander will remain the same. There will be no increase in actual production or emissions at the facility. According to the application, this project is not related to other recently permitted projects. PSD review is not required.

- B. 15A NCAC 02D .1111 "Maximum Achievable Control Technology" 40 CFR Part 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products - The Dudley facility is classified as an existing affected source under this rule. A project can trigger a change in a facility's classification to reconstructed source if the project meets the reconstruction criteria under 40 CFR §63.2. To qualify as reconstruction, the fixed capital costs of the project must exceed 50% of the fixed capital cost of a new affected source. This project does not meet the criteria for reconstruction.

VI. Other Regulatory Requirements

- An application fee of \$929.00 is required and was received by DAQ.
- The appropriate number of application copies was received on May 5, 2017.
- A Professional Engineer's Seal is required and was included in this application (ref. Charity Coury, P.E. Seal No. 039697).
- Receipt of the request for a zoning consistency determination was acknowledged by Chip Crumpler, Wayne County Planning Dept., on May 8, 2017. The proposed operation is consistent with applicable zoning ordinances.
- Public notice and EPA review are required for this significant modification under 15A NCAC 02Q .0516.
- IBEAM Title V Equipment Editor (TVEE) update was verified on **XXXX**.
- According to the application, the facility does not handle any of the substances subject to 112(r) at quantities greater than the applicability threshold.
- The application was signed by Mr. Michael Golden, Plywood Plant Manager, on May 2, 2017.

VII. Draft/Proposed Permit Review Summary

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to

persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. ##### is an affected state/local program within 50 miles of the facility.

- Mr. Robert Bright, (WARO) was provided a draft permit for review on August 18, 2017. Mr. Bright responded on XXXX, 2017 with XXXX comments. All comments were addressed.
- Ms. Brandy Long (GP-Dudley) was provided a draft permit for review on August 18, 2017. Ms. Long responded on XXXXX, 2017 with XXXXX comments. All comments were addressed.
- NCDAQ published a Public Notice of the proposed Title V permit renewal on XXXXX, 2017 on DAQ website. The public comment period expired on XXXXX, 2017 with comments received.
- U.S. EPA Region IV was provided a draft permit for review on XXXXX, 2017. EPA comment period expired on XXXXX, 2017 with comments received.

VIII. Recommendations

This permit application has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is expected to achieve compliance as specified in the permit with all applicable requirements. The applicant and WARO were provided a draft permit on XXXX. WARO responded on XXXXX with XXXX comments. The applicant responded on XXXX with XXXX comments. DAQ recommends permit issuance.